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NON-FERROUS METALS INDUSTRY

ACCOMPLISHMENT PLAN. BROAD OBJECTIVES

ENVIRONMENTAL PROTECTION AGENCY

MARCH 1972

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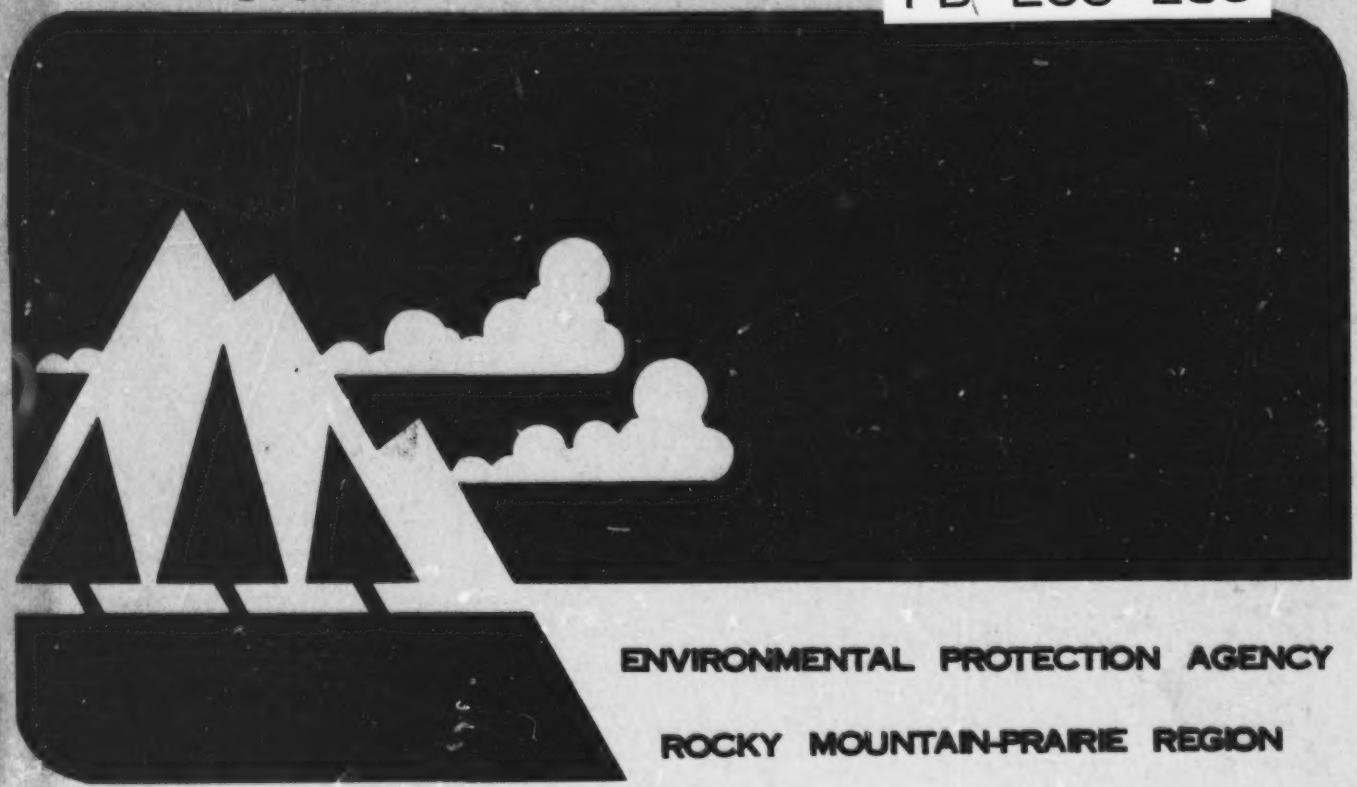

ENVIRONMENTAL PROTECTION AGENCY

ROCKY MOUNTAIN-PRAIRIE REGION

ACCOMPLISHMENT PLAN

REGION VIII

NON-FERROUS METALS INDUSTRY

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Sulfur oxide emissions from the non-ferrous metals industries are causing ambient air quality standards to be exceeded in four locations in Montana and Utah. The objective of this plan is to insure that the national ambient air quality standards will be achieved by May 30, 1975. The means to this end are described specifically in each of the six tasks. The tasks are a step-wise procedure for proceeding to the end objective. Fulfillment of Task 1 will establish the basis for development of control regulations. Tasks 2 and 3 will proceed in parallel; completion of these tasks will result in definition of what controls each smelter will have to meet by May 30, 1975. Task 4 is envisioned to provide the EPA with the determination of whether or not there are acceptable alternatives to permanent emissions controls. Task 5 will provide the mechanism for monitoring the ambient air quality around each smelter to determine if air quality standards will be met. Task 6 will provide the "watch dog" aspects of the entire plan.

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ACCOMPLISHMENT PLAN

REGION VIII

NON-FERROUS METALS INDUSTRY

MARCH 1972

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NON-FERROUS METALS INDUSTRY
Accomplishment Plan

Broad Objectives

To assure that smelters are taking the steps necessary to comply with the ambient air quality standards by compliance date in mid-1975, to provide an adequate monitoring system to check for violations, and to reduce emissions in the interim.

SPECIFIC PLANS AND TASKS FOR AIR QUALITY IMPROVEMENT

1.1 Insure that the national ambient air quality standards will be achieved by May 30, 1975.

Purpose of the Plan

Several steps must be taken by EPA, the States, and the non-ferrous metals industry to assure that the standards will be met in mid-1975. This plan sets forth those steps and the inter-relationships involved.

Situation

Sulfur oxide emissions from the non-ferrous metals industries are causing ambient air quality standards to be exceeded in four locations in Montana and Utah. In most of these locations, the smelter is essentially the sole source of sulfur oxides. Ambient air quality standards must be achieved in these locations by May 30, 1975; therefore, emissions reductions are required. Specific sources affected are Kennecott Copper Corporation in Magna, Utah; Anaconda at Anaconda, Montana; Anaconda at Great Falls, Montana; and ASARCO at East Helena, Montana.

A State Air Implementation Plan has been submitted by the State of Utah setting schedules for compliance to meet the May 30, 1975 deadline. EPA is currently reviewing this plan. Montana has also submitted an Air Implementation Plan.

Approach

The objective of this plan is to insure that the national ambient air quality standards will be achieved by May 30, 1975. The means to this end are described specifically in each of the six tasks. Air and Water Programs Division will coordinate the plan with major support from State programs, Surveillance and Analysis, Enforcement, and North Carolina Staff. The tasks are a step-wise procedure for proceeding to the end objective. Fulfillment of Task 1 will establish the basis for development of control regulations. Tasks 2 and 3 will proceed in parallel; completion of these tasks will result in definition of what controls each smelter will have to meet by May 30, 1975. Task 4 is envisioned to provide the EPA with the determination of whether or not there are acceptable alternatives to permanent emissions controls. Task 5 will provide the mechanism for monitoring the ambient air quality around each smelter to determine if air quality standards will be met. Task 6 will provide the "watch dog" aspects of the entire plan. Actions performed within this task will allow the EPA to make sure that the smelters and other related industries are doing what they are required to do.

Task 1 - Develop Data Base for Each Smelter

April 1, 1972	- Work with North Carolina Staff to run computer diffusion models using available meteorological data and individual plant emission information to predict estimated long and short term concentrations.
April 15, 1972	- Summarize known facts related to copper, lead, and zinc smelters in the region including emissions and process data, and any air quality data associated with each plant.
August 1, 1972	- Provide supplemental verification of predicted air quality through added air sampling.
September 1, 1972	- Conduct plant visits to all smelter locations in Region VIII and to any smelters employing a sophisticated intermittent control system. Prepare detailed in-house reports concerning the operations of these facilities.
Project Manager	- Terry Thoem, Air Quality Branch.

Task 2 - Promulgate Emission Regulations for Montana if Montana Implementation Plan does not adequately address the issue.

June 1, 1972 - Using the data gathered for each smelter, propose control regulations which will provide for the achievement of ambient air quality standards at each smelter location. These will be permanent emissions reduction controls. This will be coordinated with Standards Development Implementation Division in Durham. Public hearings will be held on the proposed regulations. The dates for hearings are to be set.

August 1, 1972 - Promulgate control regulations after public hearings. This will involve A & W and SDID in Durham.

Project Manager - Terry Thoem, Air Quality Branch

Task 3 - Evaluate Utah Implementation Plan Control Strategy

April 1, 1972 - Complete evaluation of the Utah Implementation Plan control strategy for sulfur oxides to determine adequacy of smelter sulfur oxides control. This involves Region VIII coordination with the Standards Development and Implementation Division (SDID) at Durham and the Office of Enforcement and General Counsel in Washington, D. C.

June 1, 1972 - Approval or disapproval of Implementation Plan.

August 1, 1972 - If the Utah strategy is found to be unapprovable, promulgation procedures will have to be taken. This will involve A&W and SDID in Durham. Promulgation would include holding public hearings on the proposed regulations.

Project Manager - Terry Thoem, Air Quality Branch.

Task 4 - Determine Criteria for Intermittent Control Systems, and specific intermittent control systems (ICS) for each plant in the region.

August 1, 1972 - Assist Durham in the appraisal of ICS as an alternative to permanent emissions reductions. If the ICS appears feasible, promulgate criteria for an enforceable ICS.

August 1, 1972 - Coordinate with Enforcement in evaluating the enforceability of an ICS. Enforcement should look at criteria for an ICS being developed jointly between Air and Water Programs in Region VIII and IX and SDID in Durham.

August 1, 1972 - Coordinate with S&A in evaluating the minimum acceptable monitoring network to be associated with an ICS.

August 1, 1972 - Prepare in-house findings on the operational ICS in the country.

January 1, 1973 - Evaluate any submitted ICS proposals on a smelter by smelter basis and determine the adequacy of the ICS method.

Project Manager - Terry Thoem, Air Quality Branch.

Task 5 - Define an Air Quality Surveillance Network

September 1, 1972	- S&A evaluation of the present air monitoring network and check of the State sampling and analysis procedures.
January 1, 1973	- Determine the extent of the air quality surveillance network which a state must employ if the ICS is accepted.
Project Manager	- Bill Basbagill, Surveillance Branch, S&A Division

Task 6 - Monitor Progress by the Companies

Require periodic progress reports from the smelters regarding their control activities.

Conduct plant inspections as deemed necessary to monitor the company's progress.

Check the ambient air monitoring networks periodically to insure that we are recording accurately the maximum expected concentrations.

August 1, 1972 - Develop schedule for progress reporting.

June 1, 1975 - Check compliance with all applicable rules and regulations.

If at any time before June 1, 1975, the company's progress is not deemed satisfactory, prepare facts and coordinate with Enforcement to take legal action.

Project Manager - Terry Thoem, Air Quality Branch.

1.2 Obtain voluntary emission reductions or instigate legal proceedings.

Purpose of the Plan

To reduce environmental damage caused by emissions from non-ferrous metals industry sources is the purpose of this plan. This can be achieved through a voluntary reduction in emissions on the part of each industry involved. If voluntary reductions are not achieved, this plan details efforts that may be undertaken to induce or to require such reductions.

Situation

Non-ferrous metals industry sources are presently discharging voluminous quantities of pollutants into the surrounding air. For pollutants covered in the implementation plans, compliance action (unless a health hazard is discovered) prior to the dates in the implementation plans is not possible. However, certain pollutants not covered by the standards are causing immediate environmental damage. The United States Department of Agriculture has documented environmental damages by fluorides from the Anaconda Aluminum Company plant at Columbia Falls, Montana. Other industries may be creating similar environmental damages through different emissions not covered by standards. In addition, it is suspected that unrecorded water quality damages are being caused by this plan as well as by other smelters as a result of pollutants being precipitated out of the surrounding air.

It is not possible to bring an action in Montana under the 1967 Air Act (as was done with Delaware Power Company in Delaware) because

there is not an approved implementation plan for the State of Montana or any air quality control region within the State.

Approach

Meet with government agencies responsible for the government lands being damaged to determine the extent of damages and legal resources. Request that these agencies and EPA meet with the industry to present the evidence of damage and request voluntary emission reductions. If voluntary compliance is not agreed to, EPA will request that the government agency take action under any available legal remedies to bring about mandatory emission reductions.

In the event that no useful legal remedies are available or cannot be used, a contingency plan has been developed to call an air enforcement conference. At the same time, monitoring programs are set up which can detect changes promised under voluntary or mandatory compliance and to determine if other air or water quality standards are being violated.

Task 1 - Obtain Agreement from Anaconda Aluminum Company for Voluntary Emissions Reduction or Institute Legal Proceedings in the Event of Non-Agreement.

Milestones

By March 15, 1972 - Regional Counsel will review applicable statutes and provide legal opinion as to feasibility of taking action through other affected Federal Agencies.

By April 15, 1972 - In coordination with the Federal Activities Coordination program, meet with Park Service, Bureau of Land Management, Forest Service, or other Federal Agencies responsible for affected properties, and State Agencies to develop adequate factual data and request cooperation in seeking voluntary compliance or if necessary, instituting legal proceedings.

By April 28, 1972 - Determine monitoring system necessary to assess extent of emissions reduction if agreement is reached.

By May 5, 1972 - Present data on environmental damages to Anaconda and request emissions reduction.

By May 15, 1972 - Make decision on whether or not to proceed with legal action based on non-acceptance of voluntary reductions, the willingness of the other agencies to become involved, and the strength of our case.

By May 16, 1972 - If court action is not taken, proceed with calling an air enforcement conference.

Project Manager - Thomas Rogers, Enforcement Branch.

Contingency Task 2 - Call Air Enforcement Conference Involving Anaconda Aluminum Company.

Situation

The Clean Air Act of 1970 [§115(b)(2)] provides a conference procedure that may be used under specified conditions. Since the air pollution problem created by Anaconda Aluminum is intrastate in nature, the conference can only be called if requested by the State Governor, or the State Air Pollution Agency, or a governing body of any municipality [with the concurrence of both the Governor and the State Air Pollution Control Agency], and if the request is concurred in by the municipality affected by the pollution or in which it originates.

A conference could also be called under §103(e) of the Clean Air Act. A request for a conference by the Governor, State agency, etc. is not required under this provision. Although such a conference is only advisory, the findings, recommendations and records are to be admitted into the proceedings of any subsequent §115 conference. Therefore, should it be impossible to obtain the necessary request for a conference from the Governor of Montana, etc., a section 103 conference would enable the EPA to draw public attention to the matter and at the same time develop a record for potential future use.

By March 31, 1972 - Determine the applicability of the above to Columbia Falls and possible responsiveness of State and local governments to requesting the conference.

By May 15, 1972	- Depending on progress in Task 1 - make State and local contacts regarding a conference request. Prepare necessary paper work and obtain necessary clearances and concurrences to call the conference, if necessary.
By May 20, 1972	- Set conference procedures in motion.
Project Manager	- John Lepley, Enforcement Branch.

APPENDIX A

MILESTONE CHARTS

	1972 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	73	74	75
SECTION 1.1															
TASK 1 - Develop Data Base for Each Smelter															
Work with North Carolina Staff to run computer diffusion models using available meteorological data and individual plant emission information to predict estimated long and short term concentrations.				X											
Summarize known facts related to copper, lead, and zinc smelters in the region including emissions and process data, and any air quality data associated with each plant.				X											
Provide supplemental verification of predicted air quality through added air sampling.								X							
Conduct plant visits to all smelter locations in Region VIII and to any smelters employing sophisticated intermittent control systems. Prepare detailed in-house reports concerning the operations of these facilities.										X					
TASK 2 - Promulgate Emission Regulations for Montana															
Using the data gathered for each smelter, propose control regulations which will provide for the achievement of ambient air quality standards at each smelter location. These will be permanent emissions reduction controls. This will be coordinated with SDID in Durham. Public hearings will be held on the proposed regulations. The dates for hearings are to be set.						X									
Promulgate control regulations after public hearings. This will involve A&W and SDID in Durham.								X							
TASK 3 - Evaluate Utah Implementation Plan Control Strategy															
Complete evaluation of the Utah Implementation Plan control strategy for sulfur oxides to determine adequacy of smelter sulfur oxides control. This involves Region VIII coordination with SDID at Durham & Office of Enforcement and General Counsel in Washington, D. C.				X											

	1972														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	73	74	75
TASK 3 (continued)															
Approval or disapproval of Implementation Plan.						X									
If the Utah strategy is found to be unapprovable, promulgation procedures will have to be taken. This will involve A&W and SDID in Durham. Promulgation would include holding public hearings on the proposed regulations.								X							
TASK 4 - Determine Criteria for Intermittent Control Systems, and specific Intermittent control systems for each plant in the region.															
Assist in the appraisal of ICS as an alternative to permanent emissions reductions. If the ICS appears feasible, develop criteria for an enforceable ICS.								X							
Coordinate with Enforcement in evaluating the enforceability of an ICS. Enforcement should look at criteria for an ICS being developed jointly between Air and Water Programs in Regions VIII and IX and SDID in Durham.								X							
Coordinate with S&A in evaluating the minimum acceptable monitoring network to be associated with an ICS.								X							
Evaluate any submitted ICS proposals on a smelter by smelter basis and determine the adequacy of the ICS method.													X		
Prepare in-house findings on the operational ICS in the country.								X							
TASK 5 - Define an Air Quality Surveillance Network															
S&A evaluation of the present air monitoring network and check of the State sampling and analysis procedures.									X						

	1972 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	73	74	75
TASK 5 (Continued)															
Determine the extent of the air quality surveillance network which a state must employ if the ICS is accepted.													X		
TASK 6 - Monitor Progress by the Companies															
Check compliance with all applicable rules and regulations. If at any time before June 1, 1975, the company's progress is not deemed satisfactory, prepare facts and coordinate with Enforcement to take legal action.															X
Develop schedule for progress reporting.								X							
Section 1.2															
TASK 1 - Obtain Agreement from Anaconda Aluminum Company for Voluntary Emissions Reduction or Institute Legal Proceedings in the Event of a Non-Agreement.															
Regional Counsel will review applicable statutes and provide legal opinion as to feasibility of taking action through other affected Federal Agencies.			X												
In coordination with the Federal Activities Coordination program, meet with Park Service, Bureau of Land Management, Forest Service, or other Federal Agencies responsible for affected properties, and State Agencies to develop adequate factual data and request cooperation in seeking voluntary compliance or if necessary instituting legal proceedings.				X											
Determine monitoring system necessary to assess extent of emissions reduction if agreement is reached.				X											

	1972 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	73	74	75
TASK 5 (Continued)															
Determine the extent of the air quality surveillance network which a state must employ if the ICS is accepted.													X		
TASK 6 - Monitor Progress by the Companies															
Check compliance with all applicable rules and regulations. If at any time before June 1, 1975, the company's progress is not deemed satisfactory, prepare facts and coordinate with Enforcement to take legal action.															X
Develop schedule for progress reporting.								X							
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Determine monitoring system necessary to assess extent of emissions reduction if agreement is reached.				X											

	1972 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	73	74	75
TASK 1 (continued)															
Present data on environmental damages to Anaconda and request emissions reduction.					X										
Make decision on whether or not to proceed with legal action based on non-acceptance of voluntary reductions, the willingness of the other agencies to become involved, and the strength of our case.					X										
If court action is not taken, proceed with calling an air enforcement conference.					X										
Contingency Task 2															
Determine the applicability of the above to Columbia Falls and possible responsiveness of State and local governments to requesting the conference.			X												
Depending on progress of Task 1 - make State and local contacts regarding a conference request. Prepare necessary paper work and obtain necessary clearances and concurrences to call the conference, if necessary					X										
Set conference procedures in motion.					X										